Machine design and electron beam control of a single-pass linac for free electron laser

Di Mitri, Simone

Curriculum Vitae

9 October 1976	Born in Terni, Italy

Educational Record

1990 – 1995	Senior High School (Scientific Lyceum) G. Galilei, Terni, Italy.
1995 – 2000	University of Pisa, Italy. Master Degree in Nuclear and Subnuclear Physics. Experimental thesis in Optical Electronics at the National Laboratory of Frascati, Rome, Italy.

Professional Record

2002 –	Staff member of the Accelerator Group at Sincrotrone Trieste S.C.p.A.
2002 – 2006	Involved in the operation of Elettra synchrotron light source. In charge of the transfer lines design for the Elettra full energy injection system. Involved in the commissioning of such new system.
2003 – 2009	In charge of the electron beam delivery system design for the FERMI@Elettra Free Electron Laser. Member of the FERMI Commissioning Team. I serve the project leader as physics liaison support for the FERMI layout and electron beam dynamics.

Professional Services

2004 – 2008 PhD Supervisor. Teacher at the 2005 Cern Accelerator Advanced School, Trieste, Italy. Contract Professor of Accelerator Physics at the University of Trieste, Department of Physics, Trieste, Italy.

EUROFEL spoke-person for particle collective instabilities and nonlinear motion in linac-based FELs.

2007 – 2011 Member of the Organizing and Program Committee of the I (2007), II (2008), III (2010) and IV (2011) Workshop on Microbunching Instability.

Member of the Scientific Advisory Board of the Intern. Part. Accel. Conference 2010, Genoa, Italy.

Member of the Scientific Program Committee of the Free Electron Laser Conference 2010, Malmo, Sweden.

Member of the Scientific Program Committee of the Free Electron Laser Conference 2011, Shanghai, China.

Talks and Collaborations on Invite

08/2006 Free Electron Laser Conference 2006, Berlin Germany. *How to obtain high quality electron bunches in the presence of normal conducting linac wakefields*.

09/2009 Karlsruhe Institute of Technology, Karlsruhe, Germany. *The 100 nm to 4 nm FERMI@Elettra FEL project*. Introduction to `elegant` for the TBONE project.

09/2009 International Conference on Accelerator Computing 2009, San Francisco, California. *Design and Simulation Challenges for the FERMI@Elettra project* .

10/2009 Societa' Italiana di Fisica, Bari, Italy. *The 100 nm to 4 nm FERMI@Elettra FEL project*.

03/2010 2^{nd} IRUVX-PP Annual Meeting, Hamburg, Germany. *FERMI@Elettra is under commissioning*.

01/2011 Kernfysisch Versneller Instituut, Groningen, The Netherlands. *The 100 nm to 4 nm Single-pass, Linac-based FERMI@Elettra FEL*. Introduction to `elegant` for the ZFEL project.

03/2011 Pohang Accelerator Laboratory, Pohang, South Korea. *Machine Design in the presence of Structural Wake Fields*. Member of the Review Committee (Accelerator Chair) at the PAL XFEL Beam Dynamics Workshop.